



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,427	11/19/2003	Serge Haumont	NOKM.074PA	7014
7590 Hollingsworth & Funk, LLC Suite 125 8009 34th Avenue South Minneapolis, MN 55425		12/26/2007	EXAMINER JEAN GILLES, JUDE	
			ART UNIT	PAPER NUMBER
			2143.	
			MAIL DATE	DELIVERY MODE
			12/26/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/717,427

Applicant(s)

HAUMONT, SERGE

Examiner

Jude J. Jean-Gilles

Art Unit

2143

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 September 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-37 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 and 26-37 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application
- ☐ Other: _____

DETAILED ACTION

This office action is responsive to the reply communication filed on 09/28/2007.

Information Disclosure Statement

1. The references listed on the Information Disclosure Statement submitted on 04/26/2004 have been considered by the examiner (see attached PTO-1449A).

Response to Amendments/Arguments

2. In the claims, 1-37 remain pending in the application with claim 1 amended for purposes of removing a typographical error. No claim has been cancelled. Claims 1-31 represent a method and apparatus for a "SYSTEM FOR DETERMINING UNRETURNED STANDBY RESOURCE USAGE."

Applicant's arguments with respect to claims 1, 26, 36, and 37 have been carefully considered, but are not deemed fully persuasive. Applicant's arguments are deemed moot in view of the existing ground of rejection as reiterated here below. Applicant has made no amendments to the independent claims as to perhaps place them in condition for allowance.

The dependent claims stand rejected as articulated in the First Office Action to the exception of those dependent claims that contain allowable subject matter.

In response to Applicant's arguments, 37 CFR § 1.11(c) requires applicant to "clearly point out the patentable novelty which he or she thinks the claims present in

view of the state of the art disclosed by the references cited or the objections made. He/She must show the amendments avoid such references or objections."

Applicant's Request for Reconsideration filed on 09/28/2007 has been carefully considered but is not deemed fully persuasive. However, because there exists the likelihood of future presentation of this argument, the Examiner thinks that it is prudent to address Applicants' main points of contention:

A: Applicant contends that with respect to claim 1, There is no teaching in *Rueger* to use message routing information received from the sending network element to facilitate the transmission of the destination subscriber. The Applicant's system of Claim 1 enables, among other things, this information to be obtained at the front end, and used up to multiple times by recipient devices that would otherwise have to access an HLR or other database to obtain message routing information relating to the destination subscriber. *Rueger* does not address this problem, nor does it provide any teaching or solution to such a problem.

As to point A, it is the position of the Examiner that *Rueger* in detail teaches the limitations of claim 1. The invention involves obtaining a subscriber's routing information for a destination subscriber and transmitting the message(s) and the routing information towards the destination subscriber. Similarly, *Rueger* discloses a visitor location register(VLR) that is operated to provide routing information about a destination to a mobile station MS) through the home location register (HLR). This mechanism does not exclude using the routing information to forward the message to a destination

server, host, provider, client or subscriber. The problem of retrieving, sending and receiving routing data to a subscriber which in turn uses that routing information to address or destination is directed to the teachings of Rueger as evidenced by the teachings of Rueger (see *par. 0010, see the disclosure of claims 6, and 9, and figs. 1-3*).

B: Applicant argues that with respect to claim 26, *Rueger* does not teach that message routing information is transmitted along with the message in order to notify downstream network elements of the routing information and thereby obviating the need for those downstream network elements to again obtain routing information elsewhere.

As to point B, again it is the position of the Examiner that *Rueger* teaches the limitations of claim 26 similarly to claim 1. as routing information is retrieved from the VLR, this information by the subscriber and forwarded accordingly, this data is kept in the local database and is used subsequently to address the its destination (see *par. 0010, 0048-0049; see the disclosure of claims 6, and 9, and figs. 1-3*).

C: Applicant contends that for claims 36 and 37, The cited paragraphs of *Rueger* do not discuss any association of such message routing information with the message, or to transmit this associated message/message routing information to a messaging center. The cited paragraphs (as well as *Rueger* in general) do not teach at least the transmission of the routing information itself. Again, *Rueger* does not teach transmitting message routing information that would otherwise have to be obtained at the receiving end of the transaction, and therefore *Rueger* fails to teach all the limitations of Claim 37.

For at least these reasons, withdrawal of the rejection to independent Claim 37 is also requested.

As to point C, see points A, and B above.

The Examiner thanks the Applicant for pointing out the fact that the reference of Mulligan is not qualified as a prior art of reference in the 103 rejection. As a result the search has been updated. No other prior art reference has been found. See section (5) of this action.

It is the position of the Examiner that Lee in detail teaches the limitations of the above mentioned claims. However, in view of Applicant's remarks, the Examiner respectfully concludes that the characterization of the prior art reference presented by the Applicant is dissimilar to the Examiner's understanding of the teaching of Rueger.

Examiner notes that no new matter has been added and that applicant has failed in presenting claims and drawings that delineate the contours of this invention as compared to the cited prior art. Applicant has failed to clearly point out patentable novelty in view of the state of the art disclosed by the references cited that would overcome the 102(e) anticipation the rejection is therefore sustained.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. **Claims 1-20, and 26-37** are rejected under 35 U.S.C. 102(e) as being anticipated by Rueger et al (Rueger), US Pub No. 2003/0018806 A1.

Regarding **claims 1-20, and 26-37**, Rueger discloses :

1. A system for reducing database queries in connection with message transmissions, comprising:

a subscriber database for storing message routing information for a plurality of mobile device subscribers, the message routing information including subscriber information and addresses of network nodes to which the subscribers are currently registered (fig. 3; par. 0036, 0037, and 0048);

a sending network element configured to retrieve the message routing information from the subscriber database for at least one destination subscriber among the plurality of mobile device subscribers, wherein the sending network element is configured to transmit at least one message and the message routing information towards the destination subscriber (par. 0010, 0040, 0048, and 0049); and

a messaging center coupled to receive the message and the message routing information from the sending network element via a data network, and to facilitate transmission of the message to a mobile device of the destination subscriber using to the message routing information received from the sending network element (see fig. 4, item SC2; also see par. 0035, 0043, 0059, 0065, and 0067).

2. The system as in claim 1, further comprising a cache to store the message routing information for use with transmission of at least one subsequent message towards the destination subscriber (par. 0040).

3. The system as in claim 2, wherein the sending network element is coupled to the cache and configured to query the cache to obtain the stored message routing information (par. 0040).

4. The system as in claim 3, wherein the network element is configured to transmit the message and the stored message routing information from the cache, if the cache contains the message routing information (par. 0040).

5. The system as in claim 3, wherein the cache is configured to retrieve the message routing information from the subscriber database if the cache does not contain the message routing information (par. 0040).

6. The system as in claim 2, wherein the messaging center is further configured to query the cache to request that the cache obtain the stored message routing information if the message routing information is not received by the messaging center, or if the subscriber information is unknown to the network node identified by the address provided via the message routing information (par. 0040; also see 0059, 0065, and 0067).

7. The system as in claim 1, wherein the messaging center is configured to query the subscriber database to obtain the message routing information if the message routing information is not received by the messaging center or if the subscriber information is unknown to the network node identified by the address provided via the message routing information (0010-0013).

8. The system as in claim 1, further comprising a Mobile Switching Center/Visiting Location Register (MSC/VLR) to which the destination subscriber is currently registered, and wherein the address of the network node to which the destination subscriber is currently registered comprises at least the address of the MSC/VLR to which the destination subscriber is currently registered (fig. 4; 0001; also see the disclosure of claims 1 and 6 in page 5).

9. The system as in claim 8, wherein the subscriber information comprises a unique subscriber identifier identifying the destination subscriber, and wherein the messaging

center is configured to transmit the message to the MSC/VLR for delivery to the destination subscriber identified by the unique subscriber identifier (fig. 4; par. 0001).

10. The system as in claim 8, further comprising a Serving GPRS Support Node (SGSN) to which the destination subscriber is currently registered, and wherein the address of the network node to which the destination subscriber is currently registered further comprises the address of the SGSN to which the destination subscriber is currently registered.

11. The system as in claim 10, wherein the subscriber information comprises a unique subscriber identifier identifying the destination subscriber, and wherein the messaging center is configured to transmit the message to the SGSN for delivery to the destination subscriber identified by the unique subscriber identifier (0001, and 0010).

12. The system as in claim 1, further comprising a Serving GPRS Support Node (SGSN) to which the destination subscriber is currently registered, and wherein the address of the network node to which the destination subscriber is currently registered comprises at least the address of the SGSN to which the destination subscriber is currently registered (0001, and 0010).

13. The system as in claim 1, wherein the subscriber information comprises an International Mobile Subscriber Identity (IMSI) (0001, and 0010).

14. The system as in claim 1, wherein the network element is configured to retrieve the message routing information from the subscriber database using a contact address of the mobile device of the destination subscriber as an index to the subscriber database (0044, 0059).

15. The system as in claim 14, wherein the contact address comprises a Mobile Subscriber ISDN Number (MSISDN) of the mobile device of the destination subscriber (0044, 0052, and 0065).

16. The system as in claim 1, wherein the subscriber database comprises a Home Location Register (HLR) in which the destination subscriber is registered (0001, and 0010).

17. The system as in claim 1, wherein the network element comprises any of a WAP gateway, presence server, terminal management server, messaging gateway, payment server, or a messaging center (fig. 4).

18. The system as in claim 1, further comprising a signaling network, wherein the network element is configured to query the subscriber database of the destination subscriber via the signaling network (fig. 4).

19. The system as in claim 18, wherein the signaling network comprises an SS7 network. *Note that SS7 is a protocol used in the public switched telephone system (the "intelligent network" or "advanced intelligent network") for setting up calls and providing services. SS7 is a separate signaling network that is used in Class 4 and Class 5 voice switches and is inherent to the disclosure of the claimed invention.*

20. The system as in claim 1, wherein the sending network element comprises a sending Multimedia Messaging Service Center (MMSC) and the messaging center comprises a receiving MMSC, and wherein the message comprises a Multimedia Messaging Service (MMS) message (0001; see claims 1 and 6 in page 5).

26. A method for reducing queries associated with the transmission of messages over a network, comprising: initiating a query, from at least one network element involved in the transmission of messages, to a subscriber database associated with a destination subscriber (fig. 3; par. 0036, 0037, and 0048); in response to the query, receiving message routing information for transmitting at least one message from the network element towards the destination subscriber (par. 0010, 0040, 0048, and 0049); transmitting the message and the message routing information from the network element to a messaging center associated with the destination subscriber; and transmitting the message from the messaging center to a delivery node for ultimate delivery to the destination subscriber, wherein the message is transmitted from the messaging center to the delivery node identified by the message routing information

received from the network element (see fig. 4, item SC2; also see par. 0035, 0043, 0059, 0065, and 0067).

27. The method of claim 26, further comprising querying the subscriber database by the messaging center to obtain the message routing information if the message routing information was not received with the message (0001; 0040).

28. The method of claim 26, further comprising querying the subscriber database by the messaging center to obtain the message routing information if delivery of the message to the delivery node fails (0001; 0015).

29. The method of claim 28, wherein querying the subscriber database by the messaging center comprises querying the subscriber database by the messaging center if subscriber information provided via the message routing information is unknown to the delivery node identified by the message routing information (0010-0013).

30. The method of claim 28, further comprising providing delivery status by the messaging center to the subscriber database if an address of the delivery node obtained from the subscriber database is the same as the address of the delivery node obtained from the message routing information provided by the at least one network element (0001, 0036-0038).

31. The method of claim 26, further comprising storing the message routing information that was received in response to the query in a cache (0040).

32. The method of claim 31, further comprising initiating a query from the at least one network element to the cache to obtain the message routing information for transmission of a subsequent message to the messaging center (0040).

33. The method of claim 31, further comprising initiating a query from the messaging center to the cache to request that the cache obtain updated message routing information if the subscriber information is unknown to the delivery node identified by the message routing information (0040).

34. The method of claim 26, wherein the message routing information for the destination subscriber comprises a subscriber identifier and an address of the delivery node to which the destination subscriber is registered (0040).

35. The method of claim 34, wherein the subscriber identifier comprises an International Mobile Subscriber Identity number (INIS), and wherein the address of the delivery node comprises an address for one or more of a Mobile Switching Center/Visiting Location Register (MSC/VLR) and a Serving GPRS Support Node (SGSN) (0044; 0067-0068).

36. A network element for facilitating the transmission of messages over a network,

comprising: a query module configured to formulate a query to a subscriber database associated with a destination subscriber (fig. 3; par. 0036, 0037, and 0048); a network interface to transmit the query and to receive message routing information in response thereto; a message transmission module to associate the message with the message routing information (par. 0010, 0040, 0048, and 0049); and wherein the network interface transmits the message and associated message routing information to a messaging center serving the destination subscriber, wherein the message routing information includes a subscriber identity of the destination subscriber and an address of a delivery node for use by the messaging center in delivering the message to the destination subscriber (see fig. 4, item SC2; also see par. 0035, 0043, 0059, 0065, and 0067).

37. A computer-readable medium having instructions stored thereon which are executable by a computer system for reducing queries associated with the transmission of messages over a network by performing steps comprising: initiating a query to a subscriber database associated with a destination subscriber (fig. 3; par. 0036, 0037, and 0048); receiving message routing information for transmitting a message towards the destination device (par. 0010, 0040, 0048, and 0049); and transmitting the message and the message routing information to a messaging center associated with the destination subscriber to facilitate transmission of the message from the messaging center to the destination subscriber using the message routing information (see fig. 4, item SC2; also see par. 0035, 0043, 0059, 0065, and 0067).

Allowable Subject Matter

5. **Claims 20-25** are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number:
10/717,427
Art Unit: 2143

Page 16

Conclusion

6. **THIS ACTION IS MADE FINAL.** Any inquiry concerning this communication or earlier communications from examiner should be directed to Jude Jean Gilles, whose telephone number is (571) 272-3914. The examiner can normally be reached on

Monday-Thursday and every other Friday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan Flynn, can be reached on (571) 272-1915. The fax phone number for the organization where this application or proceeding is assigned is 571-273-3201.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-0800.

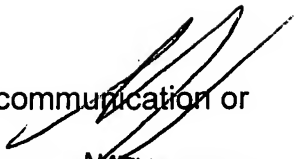
Jude Jean-Gilles

Patent Examiner

Art Unit 2143

JJG

December 13, 2007


NATHAN FLYNN
SUPERVISORY PATENT EXAMINER